

What is claimed is:

1. An implant that retains a native heart valve leaflet to resist retrograde flow comprising a scaffold sized and configured to rest adjacent all or a portion of a native heart valve annulus, at least a portion of the scaffold defining a pseudo-annulus and including a retaining structure near or within the pseudo-annulus that is sized and shaped to overlay at least a portion of one or more native valve leaflets, the scaffold further including spaced-apart struts sized and configured to contact tissue near or within the heart valve annulus to brace the retaining structure to resist leaflet eversion and/or prolapse.
2. An implant according to claim 1 wherein the retaining structure comprises a wire-form structure.
3. An implant according to claim 1 wherein at least one of the struts comprises a wire-form structure.
- 20 4. An implant according to claim 1 wherein the retaining structure and the struts each comprises a wire-form structure.
- 25 5. An implant according to claim 1 wherein the scaffold is collapsible for placement within a catheter.
6. An implant according to claim 1 wherein at least one of the struts carries a structure sized and configured to increase a surface area of contact with tissue at, above, or below the annulus.
- 30 7. An implant according to claim 1 further including at least one structure appended to the scaffold and being sized and configured to contact tissue at, above, or below the heart valve annulus to stabilize the scaffold.
- 35 8. An implant according to claim 1

wherein the scaffold includes a material and a shape to provide a spring-like bias to enable compliant contact with tissue near or within the heart valve annulus.

5 9. An implant according to claim 1
 wherein the struts reshape the heart valve
annulus. 10. An implant according to claim 1
 wherein the struts apply tension to tissue to
reshape the heart valve annulus.

10 11. An implant according to claim 1
 wherein the struts displace tissue to reshape
the heart valve annulus.

12. An implant according to claim 1
further including a second heart valve
15 treatment element appended to the scaffold to affect a
heart valve function.

13. An implant according to claim 12
wherein the second heart valve treatment
element includes means for reshaping the heart valve
20 annulus for leaflet coaptation.

14. An implant according to claim 12
wherein the second heart valve treatment
element includes means for separating tissue along an
axis of the heart valve annulus for leafleted coaptation.

25 15. A method for retaining a native heart
leaflet to resist retrograde flow comprising the steps of
introducing an implant as defined in claim 1
into a heart, and

30 resisting leaflet eversion and/or prolapse by
locating the scaffold as defined in claim 1 adjacent all
or a portion of a native heart valve annulus to define a
pseudo-annulus with the retaining structure as defined in
claim 1 overlaying at least a portion of one or more
35 native valve leaflets and with the spaced-apart struts as

defined in claim 1 contacting tissue near or within the heart valve annulus to brace the retaining structure.

16. A method according to claim 15
wherein the introducing step comprises using
5 an open heart surgical procedure.

17. A method according to claim 15
wherein the introducing step comprises using a
surgical procedure in which the implant is carried within
a catheter.

10 18. A method according to claim 15
wherein the introducing step comprises using
an intravascular surgical procedure.